



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|--|-------------|----------------------|---------------------|------------------|
| 10/776,176 | 02/12/2004 | Michel Couture | 16626-2us PTN/df | 3079 |
| 7590 | 08/11/2008 | | EXAMINER | |
| MICHEL COUTURE 360 TERRASSE ROBILLARD SAINT-ANDRE'-D'ARGENTEUIL QUEBEC, J0V 1X0 CANADA | | | HAGEMAN, MARK | |
| | | | ART UNIT | PAPER NUMBER |
| | | | 3653 | |
| | | | MAIL DATE | DELIVERY MODE |
| | | | 08/11/2008 | PAPER |

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

| | | | |
|------------------------------|------------------------|---------------------|--|
| Office Action Summary | Application No. | Applicant(s) | |
| | 10/776,176 | COUTURE, MICHEL | |
| | Examiner | Art Unit | |
| | Mark Hageman | 3653 | |

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) Responsive to communication(s) filed on 02 June 2008.
 2a) This action is **FINAL**. 2b) This action is non-final.
 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) Claim(s) 62-78 is/are pending in the application.
 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
 5) Claim(s) 62-72,77 and 78 is/are allowed.
 6) Claim(s) 73-76 is/are rejected.
 7) Claim(s) _____ is/are objected to.
 8) Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) The specification is objected to by the Examiner.
 10) The drawing(s) filed on _____ is/are: a) accepted or b) objected to by the Examiner.
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 a) All b) Some * c) None of:
 1. Certified copies of the priority documents have been received.
 2. Certified copies of the priority documents have been received in Application No. _____.
 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ . |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____. | 6) <input type="checkbox"/> Other: _____ . |

DETAILED ACTION

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claims 73-76 are rejected under 35 U.S.C. 102(b) as being anticipated by

Winkler. Winkler discloses,

-Re claim 73 a method for separating a particle stream into particle groups, comprising

- vertically diluting the particle stream by directing the particle stream into a falling condition within a passageway and accelerating the particle stream under the action of gravity (figure 2);
- horizontally diluting the particle stream by distributing the particle stream by subjecting the particle stream to high pressure fluid flow creating lateral forces so as to distribute the particle stream over a surface area of said passageway with said particle stream remaining inside said passageway (figure 2 top nozzle d);
- projecting a particle group away from a remainder of the particle stream and outside of said passageway by creating a fluid flow of predetermined magnitude across the particle stream in said falling condition (remaining nozzles d); and

- collecting the particle group and the remainder of the particle stream at separate locations (g and bottom left figure 2).

Examiner contends that the combination of positive and negative pressure through the top nozzle d will cause horizontal dilution as claimed.

-Re claim 74 a step of substantially horizontally diluting the particle stream by providing a horizontal velocity to the particle stream prior to vertically diluting the particle stream (figure 2). Examiner contends that vertical dilution takes place over the length of the chamber while the horizontal dilution takes place at the top of the chamber.

-Re claim 75 distributing the particle stream includes injecting a fluid flow into the particle stream to distribute the particle stream over the surface area of the passageway (top nozzle d).

Re claim 76 collecting the particle group and the remainder of the particle stream at separate locations includes collecting the particle .group into at least two particle subgroups by providing a first collecting location for collecting the separated particle groups, and a second collecting location for collecting the remaining particle stream in the passageway, so as to collect particles in the subgroups according to the predetermined magnitude, the predetermined magnitude influencing the quantity and traveling distance of entrainment and projection of the particles (g and bottom left figure 2).

Allowable Subject Matter

3. Claims 62-72, 77, and 78 are allowed.
4. The following is an examiner's statement of reasons for allowance: The prior art fails to anticipate or render obvious the specific configuration of the apertures and nozzles as claimed. Specifically the presence of a wall above the upper most transfer aperture and the fluid injection nozzle of the distributor being located above the uppermost transfer aperture in combination with the other elements in the claim distinguishes the claims from the prior art.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Response to Arguments

5. Applicant's arguments filed 6-2-2008 have been fully considered but they are not persuasive. Applicant stated,

"Winkler nowhere discloses or suggests a step of distributing the particles horizontally within one of the chambers (c) and (f)."

Examiner disagrees and maintains that the combination of positive and negative pressure through the top nozzle d will cause horizontal dilution as claimed. Specifically during periods of negative pressure the particles will be drawn in and across chamber c

towards the nozzles d. Examiner notes that cancellation of the method claims or an amendment appropriately adding the structure of the allowable apparatus claims to the method claim should put the application in condition for allowance.

Conclusion

6. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Mark Hageman whose telephone number is (571) 272-3027. The examiner can normally be reached on M-F 7:30-4:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Patrick Mackey can be reached on (571) 272-6916. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Patrick H. Mackey/
Supervisory Patent Examiner, Art
Unit 3653

MCH